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ABSTRACT

This second of a series of evaluation reports of the Cooperative Urban Teacher Education (CUTE) program covers 1968-69 and replicates portions of the 1967-68 evaluation, assesses the effects of the program, and provides recommendations to the program directors. Data were collected in Kansas City, Mo., Oklahoma City, Okla., and Wichita, Kansas, three times during the 16-week program. The instruments and data-gathering devices used were the McREL Interaction Analysis, the Rokeach D-Scale, Teaching Situation Reaction Test, the Minnesota Teacher Attitude Inventory, the Pensacola Z-scale, the Cultural Attitude Inventory, and the Semantic Differential. Students also maintained logs to record their emotional feelings resulting from the program. After analysis of the data, 15 recommendations were made for improvement of the program, including inter-staff idea exchange, additional opportunities for students to discuss inner-city problems, individual conferences for students, greater involvement of the cooperating teachers, more practice of skills during microteaching sessions, and better understanding of the testing techniques and objectives. Descriptive statistics of test results for all semesters are given in the appendix. A related document is SP 004 290. (MBM)

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SUMMARY OF THE COOPERATIVE URBAN TEACHER EDUCATION EVALUATION 1968-69

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FOREWORD

This is a summary of the 1968-69 evaluation report of the Cooperative Urban Teacher Education (CUTE) program. This program, under the direction of Dr. Grant Clothier, is currently operating in three locations: Kansas City, Missouri; Oklahoma City, Oklahoma; and Wichita, Kansas.

CUTE is a pre-service teacher education program aimed at improving the quality of inner-city teachers and establishing a design for coordination among social and educational institutions to enhance a crucial segment of teacher education.

This report represents the efforts of a large number of people who devoted their time and effort to effecting the data collection, analysis, and writing of the report.

Special thanks are due Miss Gretchen Menn and Mrs. Beverly Jacobson for helping with the summary. Also special mention should be made to the typists Mrs. Betty Gatlin and Mrs. Estrid Hess. To the students who volunteered their time and to the public schools who helped in making the study possible, many thanks.

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SUMMARY OF CUTE EVALUATION
1968-69

This is the second in a series of evaluation reports of the Cooperative Urban Teacher Education (CUTE) program. The results of the 1968-69 evaluation effort are reported in this summary. Some references are made to the 1967-68 evaluation findings. This occurs when data have not been reported in the first summary or when comparisons are made between data from the two years. Descriptive statistics of test results for all semesters of the CUTE program are tabled in the appendix.

Purpose

One purpose of the evaluation this year was to replicate portions of the evaluation made during the 1967-68 school year. A second pupose was to assess the effects of the program and to provide recommendations to the program directors based on evidence and information garnered as a result of the evaluation.

Method

Data were collected at three locations: Kansas City, Missouri, both fall and spring semester (CUTE 3 and 4); Oklahoma City, spring semester (Oklahoma CUTE 1); and Wichita, spring semester (Wichita CUTE 1). The instruments and data gathering devices used this second year had been adapted during the first school year of program development (1967-68). Some of the original instruments, as will be noted later, were not used the second year.

Data were collected three times during the 16-week program: the first week (T_1), the eighth week (T_2), and the sixteenth week (T_3). Data for the

Comparison groups were collected primarily at T_3, since comparable 16-week programs were not easily located.

Statistical tests of significance were made for differences occurring from one testing time to the next (computer program BMDO3V*). The technique used was analysis of covariance for repeated measures. In addition, a one-way analysis was used to determine the statistical significance of differences in mean scores between student teachers in the CUTE program and other student teachers, practice-teaching in the inner city, who volunteered to participate in the evaluation (computer BMDO4V*). For both statistical tests, the .05 level of confidence was chosen as indicating a statistically significant difference and the Rokeach D-Scale was used as the covariate.

One data collecting device, the classroom interaction analysis, did not lend itself to statistical hypothesis testing. In this case, percentages of categories departing from general practices were inferred to be significant.

Another key source of information about the program and its various aspects was the student logs. These logs were kept by the students throughout the entire program and were collected after the final interview and when grades had been submitted to students' colleges or universities. Obviously, an analysis of this type is highly subjective; but the logs represent participants' reactions to the program.

Additional evidence of program effects are being collected in a continuing follow-up of the CUTE graduates. Information about graduates' place of employment (inner-city teaching or other), and information from a

*Credit must be given to the Computation Center, University of Kansas

questionnaire which principals of the graduates are asked to complete, are analyzed and provide feedback about the effects of specific aspects of the program and the effectiveness of its product--the CUTE graduate.

Other data being utilized in the follow-up study include a limited number of attitude scales graduates are asked to complete. A few graduates allow classroom observations to be made and this material is incorporated in the follow-up study. It is possible that these data may serve as a means of establishing a relationship between scores on tests, classroom observation, and principal's rating. If sufficient data are collected (dependent upon the willingness of graduates and principals to participate), some index of "success" may be established. Also, if the data are adequate, statistical tests between post-training test scores and test scores after intervals of teaching experience (one-year intervals) may be made.*

Data Instruments Used

Biographical data were obtained from students enrolled in the CUTE program and the Comparison group. The two groups were compared regarding college affiliation (type of college--coeducational or non-coeducational), major course of study, and the head of the household's occupation.

Below is a list and brief description of the measuring devices used; more detailed information will be provided in the next section.

1. The McREL Interaction Analysis is a modification of Flanders' ten category teacher-pupil interaction system. It is designed to measure teacher talk and pupil talk. The philosophy of the instrument is that

*See CUTE Follow-up Report 1967-68.

direct teacher statements minimize and indirect teacher statements maximize pupils' freedom to respond.

2. The Rokeach D-Scale Form F is a 40-item Likert scale, measuring individual differences in openness or closedness of belief systems.

3. The Teaching Situation Reaction Test poses a general teaching situation to which respondents must react. The test situation includes course planning, handling restlessness and inattention, dealing with conflict between students, etc. The test authors maintain that the instrument will predict student teaching grades, as well as teacher performance.

4. The Semantic Differential is a data gathering device used to ascertain an individual's meaning of certain concepts by use of scales of bi-polar adjectives which describe the concept.

5. The Minnesota Teacher Attitude Inventory is a well-known and widely used instrument designed to: measure directly those attitudes of a teacher which predict how well he will get along with pupils in interpersonal relationships, and measure indirectly how well satisfied he will be with a teaching career. The instrument is a Likert scale with 150 five-option items.

6. The Cultural Attitude Inventory is a 50-item Likert-type attitude scale which measures attitudes and knowledge about the culturally-deprived child. The author maintains that the scale can be useful in identifying student teachers who could be effective with culturally-deprived children.

7. The Z-scale is a 66-item forced choice attitudinal measure of authoritarianism which is built against the F-scale as criterion. The Z-scale is constructed around four aspects of authoritarianism: dependence, rigidity, anxiety, and hostility.

Biographical Data

A description of the sample. The Biographical Data Sheet was administered to CUTE students and Comparison group students. It asked information about: college affiliation (type of college--coeducational or non-coeducational), major course of study, and the occupation of the head of the household.

The occupational categories listed on the Biographical Data Sheet were taken from Miller's Handbook of Research Design and Social Measurement as adopted from categories originated by the United States Census Bureau.

The data collected from these data sheets helped to identify the degree of similarities and/or differences between the CUTE group and the Comparison groups.

A general description of CUTE and Comparison students has been inferred from the data extracted from the individual data sheets. Table 1 contains the number of CUTE and Comparison groups and the total number of students in each group for each semester.

Although the idea of comparison groups was conceived earlier, data for comparison purposes were first collected during the second semester of the CUTE program. Those students who composed the first Comparison group were student teaching at approximately the same time as CUTE students; however, not necessarily in the same schools.

Comparison students were enrolled in three area universities: the University of Missouri, Kansas City; Lincoln University, Jefferson City, Missouri; and the University of Kansas, Lawrence. The two former universities were participating in the CUTE program.

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Comparison students practice taught in urban, suburban, and inner-city schools in approximately six different school districts. The Comparison group was not carefully matched with the CUTE students.

TABLE 1

Number of Students in CUTE and Comparison Groups

Group Name	Total Number
Cute 1 (fall, 1967)	22
Comparison*	--
CUTE 2 (spring, 1968)	18
Comparison	42
CUTE 3 (fall, 1968)	22
Comparison	22
CUTE 4 (spring, 1969)	29
Comparison	25
Oklahoma City 1 (spring, 1969)	30
Comparison**	--
Wichita 1 (spring, 1969)	27
Comparison	26

* Comparison data were first collected during the CUTE 2 program (spring, 1968).
**Comparison data were not collected for CUTE 1, Oklahoma City.

Subsequent Comparison student volunteers were sought on the basis that they were teaching in inner-city schools and at the same time as CUTE students. No Comparison group students were found to have participated in a 16-week, inner-city, student-teaching experience that could be equated to the CUTE eight-week student-teaching schedule.

Conclusions. The following list contains some of the similarities noted among CUTE groups:

1. Most CUTE students attended a college with religious affiliation.
2. They attended a college with an enrollment between 500 and 2,000 students.
3. Most were women.
4. Most majored in elementary education.
5. Most of the CUTE students came from hometowns with populations of 250,000 or more.
6. The head of the household from which CUTE students came had relatively stable employment.
7. Most of the CUTE students preferred placement in lower socioeconomic schools.
8. Most CUTE participants were between 20 and 23 years of age.
9. Most CUTE students attended coeducational colleges.
10. The modal size of the high school class of CUTE students was 200 or more.
11. Most CUTE students stated a career aspiration in teaching.

CUTE groups were different in the following way:

The major difference in CUTE groups appeared to be the occupational choice of the head of the household, i.e., service, sales, professionals, and skilled workers.

Similarities between CUTE and Comparison groups include:

1. Similarity in the size of the college town.

2. Most students were women.

3. Most students attended coeducational schools.

4. According to modal data, most students majored in elementary education.

5. Most of the students came from hometowns with a population of 250,000 or more.

6. Modal data indicates that high school graduating classes for CUTE and Comparison students included 200 or more.

7. The head of the household for all students had relatively stable employment.

8. The age range for all groups were generally between 20 and 23 years.

The following list contains the differences between CUTE and Comparison groups:

1. The modal data indicates a different preference for socio-economic level of teaching. (Most CUTE students preferred a lower socioeconomic teaching situation; most Comparison students preferred middle socioeconomic situations.)

2. CUTE groups attended religious-affiliated colleges; Comparison groups attended state-supported colleges.

3. Generally, Comparison groups attended much larger colleges.

Limitations. There are some limitations to the amount and kinds of information collected using this data sheet. However, in order to assume uniformity of information, the decision was made to continue using this form, noting some of the following kinds of inadequacies.

In the categories describing the high school from which students were graduated, the following additional information could have been sought:

1. Was the school private or public?

2. More accurate description of larger graduating classes.

In addition to the college major which was indicated, the college minor could have been ascertained. Aspiration toward graduate study should

have been another occupational direction for the student.

Data such as marital status, academic achievement, and means of financial support might have been helpful in determining similarities and differences among the groups.

Questions about a student's working experience, and family history might have been useful data for isolating commonalities and/or differences among groups. Reason or reasons students enrolled in the CUTE program could have been useful data.

In spite of these limitations, it appears that the data collected does illustrate degrees of similarity and difference among CUTE groups and between CUTE and Comparison groups.

McREL Interaction Analysis

The McREL Interaction Analysis is a modification of Flanders' ten category teacher-pupil interaction system. During the 1967-68 school year, several additional categories were added to the Flanders' categories.

The verbal balance in this modified system is divided into two major categories: student talk and teacher talk. In addition, teacher talk can be classified as direct or indirect. A teacher's direct statements minimize the freedom of the student to respond; whereas, a teacher's indirect statements maximize the freedom of the pupils to respond.

Analysis of the first year's data indicated that some categories were not discriminating adequately among pupil-teacher classroom behaviors, as a result these categories were not included in subsequent data collections. Other categories were changed to improve future data collections.

Two categories were added during the 1968-69 school year; current categories are:

1. Teacher accepts feeling
2. Teacher praises or encourages pupil
3. Teacher accepts, clarifies, or uses ideas of pupils
4. Teacher asks a question

41. Teacher asks a series of probing questions

5. Teacher gives information or lectures
6. Teacher gives directions to pupils
7. Teacher criticizes or justifies authority
8. Pupil responds to teacher initiated questions

81. Pupil reads aloud teacher assignment

9. Student initiates talk
10. Constructive activity without distinct observable interaction
11. Disruptive silence or confusion which does not direct activity to an acceptable learning objective
12. Different pupil talking following a first pupil speaker

Interpretation of data. The use and interpretation of this data collection for CUTE project evaluation is based on the general assumption that indirect verbal teaching behavior is more desirable than direct verbal teaching behavior.

Percentages of time student-teachers and pupils talk, the I/D Ratio, the revised i/d ratio, and the percentages of time recorded in verbal behavior in categories 3 and 7 were calculated.

The I/D ratio reflects the relative number of indirect and direct teacher statements. An I/D ratio of .33 means that for every two direct statements there was only one indirect statement. The revised i/d is calculated without categories 4, 41, 5, lecturing and questioning, and indicates whether the teacher is direct or indirect in motivation and control.

TABLE 2

Normative Indexes of Flanders Interaction Analysis

Data Categories	Normative Expectation Indexes
Percentage of Teacher Talk	70%
Percentage of Student Talk	30%
Percentage of Category 3	2% of tallies for direct teachers 9% of tallies for indirect teachers
Percentage of Category 7	5% of tallies for direct teachers 1% of tallies for indirect teachers
Regular I/D ratio Columns 1, 2, 3, 4, 41/1, 2, 3, 4, 41, 5, 6, 7	.50*
Revised 1/d ratio Columns 1, 2, 3/1, 2, 3, 6, 7	.50*

* The larger these indexes, the more indirect.

Data collection procedures. Observers were trained in 30-40 hour training sessions and intra-rater and/or inter-rater reliabilities of .85 were desired for each observer. (Scott's coefficient).[1] Observers were

[1]Ned A. Flanders, Interaction Analysis in the Classroom: (Ann Arbor: University of Michigan, 1964), p. 15.

sent individually to classrooms of CUTE and Comparison group students, and instructed to make one tally approximately every three seconds for a minimum of 20 minutes per student teacher, providing a matrix of approximately 400 tallies--sufficient for inference about verbal communications.[2]

Each observation was of one teaching unit or activity. The sums of the matrix for each student teacher were entered into a summary matrix in order to achieve group data for comparison.

Analysis of data. (See p. 30 to p. 35 for tables.) The analysis of summary matrixes in terms of "norms" for the 1968-69 school year indicated the patterns of verbal behavior of CUTE students. The data, for analytical purposes, included indexes for the three data collecting times at each site. The analysis also included a comparison to similar data from volunteer comparison groups not in the CUTE program, but who were observed at the close of their student teaching experience.

In addition to the analysis of data in terms of "norms," arbitrary indexes were chosen as criteria reflecting the achievement of certain program objectives.

The program objectives and the concomitant indexes include:

Objective: The student teacher accepts pupil verbalization of feelings.

Index: Classroom observation data--category 2--recordings of over 2% are interpreted as favorable and exceeds "current practices."

Objectives: The student teacher is "indirect" in his teaching. He solicits pupil participation in classroom discussion.

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[2]Ned A. Flanders, "Interaction Analysis and Inservice Training," Journal of Experimental Education, Fall, 1968, p. 127.

Index: Classroom observation data--4-8 cell--less than 30% is favorable in that it is less than current practice; 41-9 cell--and recordings in this cell would be evidence of pupil participation; 9-9 cell--change of 1% or more would be evidence of moving toward increase in pupil participation.

Objective: He asks provocative questions, probing for knowledge beyond the information give by pupils which require demonstration of student understanding rather than memory.

Index: Classroom observation--any recording in category 41--would be acceptable evidence of possessing these skills.

Data for these arbitrary indexes were collected from each site and at each of the three data collecting times. The data indicated trends or patterns in verbal behavior over the 16-week period. Contrasts between CUTE and Comparison groups were made for the three locations, but they were collected at T_3 for the volunteer comparison group.

Summary. The summarized data seemed to indicate that CUTE students:

1. Utilized praise and encouragement in their teaching.
2. Demonstrated some skill in the use of probing questions.
3. Exercised control on interaction in the 4-8 cell.
4. Demonstrated favorable ability to encourage pupils to initiate their own ideas.

The Rokeach D-Scale

The Rokeach D-Scale, Form F is a 40 item Likert scale to measure individual differences in openness or closedness of belief systems. It is assumed that a person's beliefs are organized into two independent parts: a belief system and disbelief system. Rokeach defines a belief

system as the psychological system (not necessarily logical) which represents all the beliefs, sets, expectancies, or hypotheses, conscious and unconscious, that a person at a given time accepts as true of the world in which he lives. The disbelief system is composed of a series of subsystems. It contains all the disbeliefs, sets, expectancies, conscious and unconscious, that a person at a given time rejects as false to one degree or another.

Finally, a belief-disbelief system has a dimension of time. A person's belief-disbelief system includes a perspective about the past, present, and future, and the manner in which they are related to each other. The perspective may be broad or narrow.

The openness or closedness of a belief-disbelief system may be determined by the extent to which "the person can receive, evaluate, and act on relevant information received from the outside on its own intrinsic merits, unencumbered by irrelevant factors in the situation arising from within the person or from the outside."[3]

An additional assumption is made about openness and closedness:

> ...all belief-disbelief systems serve two powerful and conflicting sets of motives at the same time, the need for a cognitive framework to know and to understand and the need to ward off threatening aspects of reality. To the extent that the cognitive need to know is predominant and the need to ward off threat absent, open systems should result....but if need to ward off threat becomes stronger, the cognitive need to know should become weaker resulting in more closed belief system.[4]

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[3]Milton Rokeach, The Open and Closed Mind (New York: Basic Books, 1960), p. 57.

[4]Ibid., p. 68.

The 40 items of the scale are distributed among the three aspects or dimensions of the definition: the belief-disbelief dimension, the central-peripheral dimension, and the time perspective dimension.

Each item has six alternatives ranging from "I agree very much" to "I disagree very much" with weights being from +3 to -3. The scoring range for an individual item is from 1-7 since the constant 4 is added to the weight of the selected alternatives. The total score for the test is the summation of the item scores. The higher the score the more closed is the person's belief system.

Statistical tests of the significance of differences have not been made for this scale. The primary use of this scale after the first year of testing has been to serve as a covariate for statistical tests of differences of other measures. (See p. 36 for table.)

Teaching Situation Reaction Test

The TSRT is a paper-pencil test which poses a general teaching situation. Forty-four specific questions concerning possible situations facing a teacher are then asked including: course planning, handling restlessness and inattention, handling conflicts between two students, handling conflict between a student and the class, working with shy students, etc. For each of the 44 items, there are four options. The examinee is asked to rank the four options for each question, indicating his first, second, third, and fourth choice. An example of a specific item and the four options illustrates the testing procedure:

You have the entire summer vacation to plan for your class.

1. When you begin planning your work you would:

   a. Ask your helping teacher what information he has about your assignment.

   b. Examine the facilities and materials available to you and determine how these might be used with members of your class.

   c. Read through various publications describing the curriculum and draw lesson plan ideas from them.

   d. Visit the school and community and incorporate what you learn into your plan.

Responses are scored according to a key following procedures suggested by Remmers, Gage, and Rummel. The test scores may range from 0 to 380; 880 indicates complete agreement.[5]

Studies reported by the test authors ascertaining test measures suggest that the test will predict student-teaching grades as well as teacher performance. These, the author states include subject-matter competence, teacher-pupil relationships, and ability to manage classroom situations and human relation skills as measured on the Barrett-Lennard, Relationship Inventory.[6] The authors do not provide information for interpretation of group scores.

Summary of statistical findings. (See p. 37 for the table.) Results of the statistical analysis of data for the Teaching Situation Reaction Test indicate there were no statistically significant difference among the 1968-69 CUTE groups mean scores from one testing time to another.

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[5]H. H. Remmers, N. L. Gage, and J. F. Rummel, A Practical Introduction to Measurement and Evaluation (New York: Harper and Row, 1965), p. 261.

[6]Jones K. Duncan and John B. Hough, "Technical Review of the TSRT," unpublished paper, (Ohio State University, 1966), p. 9

Also, there were no statistically significant differences between CUTE groups and the Comparison groups at T_3.

This does not replicate the findings for the 1967-68 CUTE groups. Mean differences for 1967-68 CUTE groups across testing times were significant for both groups at the .05 level. The difference in mean scores between CUTE 2, T_3 and the Comparison group T_3 was also significant at the .05 level. Findings for this test did not replicate 1967-68 data, nor were research hypotheses supported. Mean scores of CUTE students did not change from one testing time to another, nor were their mean scores significantly different from Comparison group mean scores.

The Minnesota Teacher Attitude Inventory

The MTAI is a 150 five-option item Likert scale. The options range from "strongly agree" to "strongly disagree"; there are no "right" or "wrong" answers. The test is scored so that item responses keyed "correct" are given a value of plus one, and item resonses keyed "incorrect" are given a value of minus one. Scores may range from -150 to +150. However, in order to avoid negative scores, 100 has been added to all scores reported in this study.

Summary of statistical findings. (See p. 38 for table). The results of the statistical analysis of the MTAI data indicated that mean scores from one testing time to another were statistically significant at the .05 level for only one of the groups, CUTE 3. Subsequent *t*-tests indicated the T_2-T_3 difference to be nonsignificant.

The difference in mean scores at T_3 between CUTE and Comparison groups were statistically significant for all but one of the CUTE groups (CUTE 4).

These findings differed slightly from those reported for 1967-68. That year the MTAI was administered to only one CUTE and Comparison group; however, the results indicated statistically significant differences, .05, between T_2 and T_3, as well as a statistically significant difference, .05, between CUTE and Comparison, T_3.

The difference noted between CUTE and Comparison groups seems to have been repeated this year, but hypotheses related to change in mean scores from one testing time to another for CUTE students have not been supported.

The Pensacola Z-Scale

The Z-Scale is a 66-item forced-choice attitudinal measure of authoritarianism and is constructed around four aspects of authoritarianism: dependency, rigidity, anxiety, and hostility.

The results of this test were not used in the statistical analysis for the 1968-69 data. Findings reported in the 1967-68 evaluation report indicated that the differences in mean between the CUTE and Comparison students did not reach statistical significance. Furthermore, there seem to be other reasons to question the efficacy of this instrument to differentiate between volunteers and nonvolunteers. This instrument will not be used in future data collection.

The Cultural Attitude Inventory

The CAI is a 50-item Likert-type attitude scale developed by Dorothy Skeel.[7] Item responses are as follows: strongly agree, agree, undecided, disagree, and strongly disagree. The scoring procedure is to assign five for the correct response (strongly agree or strongly disagree depending on the direction of question), four for the next nearly correct response, etc. Total scores may range from 50 to 250 with a higher score indicating the more desirable attitude and greater knowledge.

For the purpose of this evaluation, the scale was further divided into two subscales: the knowledge subscale with 19 items and the attitude subscale with 28 items.

Skeel reports the reliability of the original instrument to be .46 (K-R), N=190.[8] Her study supports the theory that the CAI can be useful in identifying student teachers who should be able to work effectively with culturally-deprived children.[9]

The author reports 183.68 as the mean for 119 elementary education majors; the standard deviation, 9.78.

Summary of statistical findings. (See p. 40 to p. 43 for tables.) The three scores--knowledge, attitude, and total--of the Cultural Attitude Inventory were analyzed separately. No comparable statistical tests were

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[7]Dorothy J. Skeel, "Determining the Compatibility of Student Teachers for Culturally Deprived Schools by Means of a Cultural Attitude Inventory," (unpublished doctoral dissertation, Pennsylvania State University, 1965).

[8]Ibid., p. 52

[9]Ibid., p. 74

made for the 1967-68 data since the CAI was administered late in the spring of 1968.

Research hypotheses were, for the most part, supported by these findings. CUTE group mean scores did change favorably from one testing time to another, and CUTE group mean scores were significantly higher statistically than comparison groups in terms of characteristics measured by the CAI.

The Semantic Differential

The Semantic Differential is a data gathering device which is widely used and has been generalized in a wide range of research application. The usual procedure is to choose a series of concepts which are relevant and represent the subject or topic to which one wishes to ascribe meaning. For each concept, bi-polar adjectives are selected and constitute scales. Each scale has seven-step intervals between its polar adjectives. The concept appears at the top of one sheet of paper with the adjectival scales listed below. The format is as follows:

My Boss

Good _____: _____: _____: _____: _____: _____: _____: bad

unfair _____: _____: _____: _____: _____: _____: _____: fair

The nine concepts used by McREL include: teacher, principals, grading, lecturing, class discussion, public schools, My Teaching, and volunteers. These concepts are formated as described below following

the suggestions of Kerling.[11]

For each of the concepts there are 12 seven-step scales. The 12 scales yield three scores which are called the evaluative, potency, and activity. Every third scale is selected for one of the derived scores; thus, four scales contribute to each of the scores.

Scales are scored by attaching the values of 1-7 to each of the steps, with 7 assigned to the positive end of the scale. Directions of the scales are reversed on every other item in order to avoid set responses.

To interpret the scores, the dictionary definition is ascribed to each of the three derived scores. Then using the magnitude of the score, one could estimate relative degrees of meaning that the respondents attach to various concepts. For example, an E score of 28 would indicate that the respondent sees the concept as having a high value; whereas an A score of 4 would be interpreted to mean the respondent sees the concept as being inactive. Score interpretations are relative to other scores on the concepts and to scores of other respondents.

Summary of statistical findings. (See p. 43 to p. 51 for tables.) The content of this analysis is based on the evaluation subscale mean scores for the nine topics. The study was made for CUTE groups 3, 4, Oklahoma City 1, and Wichita 1. The data from these groups yielded 36 patterns from which four general trends were identified. The evaluation mean scores for the nine topics were plotted and analyzed by inspection to discover the pattern for the groups among the three data collecting times. The analysis

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[11] Fred N. Kerlinger, Foundations of Behavioral Research, (New York: Holt, Rinehart and Winston, 1966), p. 571.

included references to the values placed on the nine topics by the CUTE students, especially topics with the highest value and the one with the lowest value, as indicated by the mean scores.

An analysis of the data identified four trends within the 36 patterns. The major trend tended downward from T_1 to T_2, upward from T_2 to T_3, and was found in 26 of the 36 patterns.

An examination of the T_3 mean scores indicated that the Comparison groups attached less value to the topics, in general, than the CUTE students. Based on the patterns of the mean scores for all three testing times, the CUTE students considered class discussion and grading to have the highest and lowest value, respectively.

Student Logs

CUTE students in Kansas City were asked to maintain a daily log. (In Wichita, CUTE students reported their responses to the program once a week on preprinted forms called reaction reports.) The purpose of the logs was to provide an opportunity for the students to record emotional feelings resulting from daily experiences in the CUTE program.

The logs also provided a way of collecting information on the following topics:

1. Feelings and opinions about the curriculum and teaching staff of CUTE,
2. feelings and opinions about fellow-students,
3. feelings and comments about their trips into the inner city,
4. feelings about visits to the board of education,
5. feelings about visits with educational leaders,

6. feelings and comments about visits to organizations geared to help inner-city residents,
7. feelings and anxieties before and during the student teaching experience,
8. feelings of fatigue,
9. occasions of success and failure,
10. occurrence of personal problems not directly related to CUTE,
11. suggestions for improving the CUTE training program,
12. signs of maturation, and
13. personal feelings at the conclusion of the program.

Even though the logs were to be maintained daily, students were not penalized for not doing so. Almost everyone did comply with this expectation, however.

The logs were not collected until the seminars, and practice teaching periods had been completed, and the college credits recorded.

Method for organizing data from student logs

1. All the logs were read in order to establish a "feel" for the data.
2. The data from each log were categorized.
3. The categories were interrelated for summary purposes.

Every effort was made to retain the spirit and literal meaning of the students' records.

Conclusion. Some of the more important conclusions concerning the CUTE 3 group include:

1. Some students wanted to participate in planning the curriculum provided in the CUTE program.

2. Students began the CUTE program with different expectations, and accepted or rejected the program in different degrees.

3. Some of the students wanted to drop out of the program, but the CUTE staff encouraged them to remain in the program.

4. CUTE students were more hopeful about inner-city needs.

5. Negro CUTE students were more out-spoken against their own race than were white students; but they were, at the same time, definitely more aware of what was going on in Negro areas than were white students.

6. Negro students were less willing to be placed in predominantly Negro schools.

7. Some Negro cooperating teachers seemed intolerant of Negro pupils.

8. Most students who experienced negative feelings early in training exhibited opposite views as they acquired more training.

Some of the more important conclusions concerning CUTE 4 include:

1. Since many students entered the program with uncertainties about the future semester, they expressed different desires and expectations.

2. Some CUTE students expressed similar feelings about society and law and order as commonly expressed by many young people today.

3. There was evidence that cooperating teachers needed more information about the CUTE program, and that they should be more carefully selected.

4. There was a need for more student participation in problem-solving during seminars.

5. There was a need to help dissenters.

6. There was a need for more specific expression of feelings by the students.

7. There was a need for the CUTE staff to express their feelings.

The major <u>similarities</u> between CUTE 3 and CUTE 4 include:

1. Most students were puzzled at the beginning of the program.

2. Micro-teaching gained popularity as students became proficient with the teaching techniques.

3. Both groups were disturbed by dissenters and overly talkative members.

4. CUTE 4 students recorded similar signs of teacher maturity; but CUTE 3 students recorded more of these signs.

5. Students from both groups reported similar teaching experiences.

Some of the important differences between CUTE 3 and CUTE 4 include:

1. Many of the visits and guest speakers were different.

2. CUTE 4 students seemed to pay less attention to characteristics of inner-city pupils.

3. The CUTE 4 group reported many influences external to the group.

4. CUTE 4 students seemed to be less excited about their classroom experiences.

The similarities and differences between the CUTE students in Kansas City and Wichita were the results of analysis of Kansas City logs and the Wichita student reaction reports. Reaction reports were written on preprinted forms and weekly submitted to the CUTE staff. (Logs were submitted at the conclusion of the program.)

Similarities between Kansas City CUTE 3 and CUTE 4, and CUTE 1 of Wichita include:

1. During the initial stages of the program, there was a lack of confidence which caused many students to feel uneasy and unwilling to participate in the seminar discussions, while others dominated the discussion periods.

2. Many students welcomed the opportunity to talk with people in the inner city.

3. Students of both sites believed that low achieving pupils should share equal teacher-time with normal achieving pupils.

4. Many students observed that poverty does not restrict itself to color or race.

5. Most students were apprehensive of student teaching before they entered the classroom.

Program Recommendations

The following recommendations were based on the analysis of the data. It was hoped that some of these recommendations would prove helpful in future program planning and revision of the CUTE curriculum. Whereas, a long list of recommendations may be viewed as an exercise in program direction, the intent here was to present some possibilities for program improvement.

1. An inter-staff idea exchange session might provide additional techniques, beneficial to all staff groups. Ultimately, there might develop a better description of the curriculum, providing the means for improvement of the evaluation reports, and eventually more specific recommendations for the program.

2. Students require time to adjust to fellow-students, CUTE staff, and the experiences provided for them. In order to ease the uncertainties and expedite the group activities, it is recommended that some kind of interpersonal skills or group dynamic skills be utilized.

3. Students' expressions in the logs indicated that some of their concerns were not being resolved adequately. The concerns included: feelings toward fellow-students, feelings about trips into the inner city, feelings about staff visits to classrooms, and feelings about classroom experiences. Perhaps, if students are kept better informed as to objectives of program activities, it will help students be more receptive to these activities.

4. CUTE students felt they needed more opportunities to discuss the problems of the inner city and teaching in inner-city schools.

5. A review of the student logs indicated that the students needed occasional individual conferences. CUTE students wished to discuss: misunderstandings in seminar sessions, feelings about classroom observations, and feelings about classroom policies which were consistent with CUTE training ideas.

6. It is recommended that CUTE students be provided with alternative experiences so that they will not duplicate courses they have had. An alternative, yet pertinent subject, should be cooperatively assigned.

7. Perhaps, if students were given hypothetical problems to solve similar to the TSPT, it would improve those test scores as well as give simulated practice in dealing with anticipated problems during student teaching experiences.

8. During the micro-teaching sessions, it might be appropriate to include more practice for skills which are recorded via the MIA and which are used as criteria for program objectives. In general, these are not appearing in the data as often nor in the hoped for degree. Serious consideration should be given to the relationship between the skills included in micro-teaching and the objectives of the program.

9. The tendency of mean test scores to be statistically significant from T_1 to T_3 and from T_1 to T_2, but not from T_2 to T_3, might reflect the impact of full-time student teaching during the last eight weeks of the program. Perhaps, more support should be provided during the last eight weeks of the program or some instructional change during the first eight weeks so that students do not experience a "let down" during student teaching.

10. In order to relieve student-teacher uncertainty about the McREL Interaction Analysis, it is suggested that more time be allotted for explaining the MIA skills--especially categories 1 (Teacher accepts pupil feelings), 2 (Teacher praises or encourages pupils), 3 (Teacher accepts, clarifies, or uses pupils), and 41 (Teacher asking a series of probing questions). Category 1, Teacher accepts emotional feelings of pupils, though not a specifically stated objective seems appropriate to the overall program goals, and should be emphasized highly.

11. The mean scores of two topics in the Semantic Differential section, namely, "Lecturing" and "My Teaching" deserve extra attention. These topics were also general concerns of the CUTE students as expressed in their logs. The Semantic Differential indicates that Lecturing was given little value by the CUTE students, yet is part of one of the micro-teaching skills. The topic My Teaching, which may include discipline, student problems, lesson plans, and teaching techniques, was a constant concern to the students. Yet My Teaching ranked fourth in value in the Semantic Differential section.

12. Involvement of the cooperating teacher, especially in their capacity as master teachers, could reinforce the program effort and enhance the success of the student teachers.

13. The CUTE students complained about having to attend seminar sessions late in the afternoon. They stated that they were too tired to benefit from classes at this late hour, and many times they did not report for the classes. It is recommended that classes be held earlier.

14. Many of the students who complained about the CUTE testing program stated that taking tests all day may be very tiring. The testing time for evaluation purposes is approximately two hours. In order to avoid negative feelings about the tests, perhaps, other testing activities, not related to the evaluation, could be scheduled for other days.

15. In general, students come from metropolitan areas and are well acquainted with city life. It is suggested program directors take that into consideration and adjust educational experiences accordingly.

APPENDIX

TABLE 3

McREL INTERACTION ANALYSIS
Time 1-Data Collection

Percentage of Teacher and Student Talk, and Columns 3, 7
Regular and Revised I/D Ratios
Number of Students and Total Frequency of Observations

	N	Teacher Talk	Student Talk	Col. 3	Col. 7	Reg. I/D	Revised I/D	Frequency of Observations
CUTE 1	--	--	--	--	--	--	--	--
COMPARISON	--	--	--	--	--	--	--	--
CUTE II	18	55.9	33.1	.58	.70	.41	.48	15,175
COMPARISON	--	--	--	--	--	--	--	--
CUTE III	20	56.9	23.3	3.57	1.92	.39	.32	10,203
COMPARISON	--	--	--	--	--	--	--	--
CUTE IV	28	50.7	32.2	3.18	.67	.39	.43	13,595
COMPARISON	--	--	--	--	--	--	--	--
OKLA.CITY I	30	48.6	29.4	3.69	1.06	.40	.41	25,156
COMPARISON	--	--	--	--	--	--	--	--
WICHITA I	27	50.2	27.8	2.45	1.04	.46	.65	11,217
COMPARISON	--	--	--	--	--	--	--	--

TABLE 4

McREL INTERACTION ANALYSIS
Time 2-Data Collection

Percentage of Teacher and Student Talk, and Columns 3, 7
Regular and Revised I/D Ratios
Number of Students and Total Frequency of Observations

	N	Teacher Talk	Student Talk	Col. 3	Col. 7	Reg. I/D	Revised I/D	Frequency of Observations
CUTE 1	22	59.8	26.5	.31	1.43	.44	.56	48,794
COMPARISON	--	--	--	--	--	--	--	--
CUTE II	17	55.9	28.8	.74	.66	.38	.47	26,805
COMPARISON	--	--	--	--	--	--	--	--
CUTE III	20	54.5	27.9	5.68	.95	.47	.46	11,741
COMPARISON	--	--	--	--	--	--	--	--
CUTE IV	28	51.6	34.5	3.77	.49	.38	.42	15,994
COMPARISON	--	--	--	--	--	--	--	--
OKLA.CITY I	30	43.9	36.1	3.09	2.31	.46	.30	26,815
COMPARISON	--	--	--	--	--	--	--	--
WICHITA I	27	59.3	25.8	2.88	1.25	.49	.69	10,510
COMPARISON	24	53.9	29.4	2.54	1.96	.42	.55	9,872

TABLE 5

McREL INTERACTION ANALYSIS
Time 3-Data Collection

Percentage of Teacher and Student Talk, and Columns 3, 7
Regular and Revised I/D Ratios
Number of Students and Total Frequency of Observations

	N	Teacher Talk	Student Talk	Col. 3	Col. 7	Reg. I/D	Revised I/D	Frequency of Observations
CUTE 1	22	55.9	29.4	.68	1.58	.40	.49	48,864
COMPARISON	--	--	--	--	--	--	--	--
CUTE II	18	52.0	33.3	.98	.68	.43	.52	29,751
COMPARISON	22	54.4	28.7	1.03	2.10	.34	.28	30,412
CUTE III	20	47.1	28.1	2.75	1.19	.36	.34	23,772
COMPARISON	13	55.5	28.1	3.79	1.29	.31	.34	6,763
CUTE IV	28	45.2	39.3	2.08	.59	.40	.33	18,120
COMPARISON	6	49.7	32.9	3.67	.33	.38	.33	3,648
OKLA.CITY I	28	37.2	37.9	2.22	2.18	.42	.26	25,450
COMPARISON	--	--	--	--	--	--	--	--
WICHITA I	27	48.8	32.8	3.25	1.27	.47	.69	11,064
COMPARISON	26	47.8	32.8	1.94	2.18	.45	.59	10,202

TABLE 6

McREL INTERACTION ANALYSIS
Time 1 - Data Collection

Percentage of Matrix of Columns 2 and 41,
and Percentage in cells 4-8, 41-9, and 9-9
Number of Students and Total Frequency of Observations

	N	Col. 2	Col. 41	Cell 4-8	Cell 41-9	Cell 9-9	Frequency of Observation
CUTE 1	--	--	--	--	--	--	--
COMPARISON	--	--	--	--	--	--	--
CUTE 2	18	.54	--	6.71	--	1.02	15,175
COMPARISON	--	--	--	--	--	--	--
CUTE 3	20	2.75	.35	7.05	.08	2.65	10,203
COMPARISON	--	--	--	--	--	--	--
CUTE 4	28	1.56	.17	6.75	.00	4.35	13,595
COMPARISON	--	--	--	--	--	--	--
OKLA.CITY 1	30	1.01	.00	6.01	.00	5.96	25,156
COMPARISON	--	--	--	--	--	--	--
WICHITA 1	27	6.29	.04	6.86	.02	6.27	11,217
COMPARISON	--	--	--	--	--	--	--

TABLE 7

McREL INTERACTION ANALYSIS
Time 2 - Data Collection

Percentage of Matrix of Columns 2 and 41,
and Percentage in cells 4-8, 41-9, and 9-9
Number of Students and Total Frequency of Observations

	N	Col. 2	Col. 41	Cell 4-8	Cell 41-9	Cell 9-9	Frequency of Observation
CUTE 1	22	3.35	--	.19	--	.59	48,794
COMPARISON	--	--	--	--	--	--	--
CUTE 2	17	1.47	--	.80	--	.19	26,805
COMPARISON	--	--	--	--	--	--	--
CUTE 3	20	3.92	.16	6.63	.04	4.48	11,741
COMPARISON	--	--	--	--	--	--	--
CUTE 4	28	2.02	.20	5.92	.01	2.63	15,994
COMPARISON	--	--	--	--	--	--	--
OKLA.CITY 1	30	1.04	.15	5.80	.09	9.00	26,815
COMPARISON	--	--	--	--	--	--	--
WICHITA 1	27	7.06	.02	9.08	.00	3.16	10,510
COMPARISON	24	5.12	.00	7.80	.00	2.01	9,872

TABLE 8

McREL INTERACTION ANALYSIS
Time 3 - Data Collection

Percentage of Matrix of Columns 2 and 41,
and Percentage in cells 4-8, 41-9, and 9-9
Number of Students and Total Frequency of Observations

	N	Col. 2	Col. 41	Cell 4-8	Cell 41-9	Cell 9-9	Frequency of Observations
CUTE 1	22	3.50	--	.48	--	.60	48,864
COMPARISON	--	--	--	--	--	--	--
CUTE 2	18	1.32	--	.85	--	.78	29,751
COMPARISON	22	1.13	--	.70	--	.52	30,412
CUTE 3	20	3.00	.00	6.58	.00	4.11	23,772
COMPARISON	13	2.09	.06	5.19	.01	3.02	6,763
CUTE 4	28	2.01	.14	6.97	.00	8.05	18,120
COMPARISON	6	2.19	.00	5.51	.00	.60	3,648
OKLA.CITY 1	28	.97	.53	5.62	.10	5.39	25,450
COMPARISON	--	--	--	--	--	--	--
WICHITA 1	27	4.99	.00	8.74	.00	5.45	11,064
COMPARISON	26	5.23	.01	7.47	.00	5.24	10,202

TABLE 9

D-SCALE

Means, Standard-deviations, and Numbers of Student Teachers for each semester and each testing

	Time 1			Time 2			Time 3		
	N	$\bar{X}$	SD	N	$\bar{X}$	SD	N	$\bar{X}$	SD
CUTE 1	22	144.82	18.61	22	143.59	18.00	22	145.09	21.77
COMPARISON	--	--	--	--	--	--	--	--	--
CUTE 2	18	129.33	23.85	18	129.22	25.96	18	119.68	28.43
COMPARISON	18	133.56	18.41	--	--	--	32	137.25	23.87
CUTE 3	22	141.50	21.94	20	146.50	27.35	19	145.42	23.75
COMPARISON	--	--	--	8	144.13	21.61	22	150.55	22.29
CUTE 4	29	148.76	19.83	28	151.04	21.52	28	153.93	25.07
COMPARISON	--	--	--	--	--	--	25	146.60	20.68
OKLA.CITY 1	30	154.33	26.70	30	152.30	26.68	30	161.00	29.78
COMPARISON	--	--	--	27	151.11	21.13	21	147.10	24.94
WICHITA 1	27	148.26	21.60	27	157.37	20.58	27	154.41	23.31
COMPARISON	--	--	--	26	152.31	22.97	23	149.39	21.02

TABLE 10

TEACHING SITUATION REACTION TEST

Means, Standard-deviations, and Numbers of Student Teachers for each semester and each testing

	Time 1			Time 2			Time 3		
	N	$\bar{X}$	SD	N	$\bar{X}$	SD	N	$\bar{X}$	SD
CUTE 1	22	505.09	50.89	22	523.27	40.93	22	497.45	29.37
COMPARISON	--	--	--	--	--	--	--	--	—
CUTE 2	18	516.06	42.55	18	523.83	53.08	18	543.78	41.16
COMPARISON	16	520.94	46.02	--	--	--	35	395.26	28.03
CUTE 3	22	493.64	40.24	20	507.60	28.68	19	492.53	37.33
COMPARISON	--	--	--	8	523.63	36.74	22	495.36	45.36
CUTE 4	29.	507.83	43.27	28	514.50	43.33	28	524.79	44.83
COMPARISON	--	--	--	--	--	--	25	513.84	39.74
OKLA.CITY 1	30	523.33	27.21	30	538.27	38.34	30	526.07	42.52
COMPARISON	--	--	--	27	516.44	43.19	21	513.19	49.01
WICHITA 1	27	510.15	45.95	27	514.30	42.47	27	508.00	40.13
COMPARISON	--	--	--	26	512.85	42.93	23	500.61	44.47

TABLE 11

MINNESOTA TEACHER ATTITUDE INVENTORY

Means, Standard-deviations, and Numbers of Student Teachers for each semester and each testing

	Time 1			Time 2			Time 3		
	N	$\bar{X}$	SD	N	$\bar{X}$	SD	N	$\bar{X}$	SD
CUTE 1	--	--	--	--	--	--	--	--	--
COMPARISON	--	--	--	--	--	--	--	--	--
CUTE 2	--	--	--	17	165.06	19.11	18	174.72	22.00
COMPARISON	17	149.59	20.33	--	--	--	35	139.91	27.14
CUTE 3	22	133.59	32.41	20	149.15	24.90	19	152.63	19.65
COMPARISON	--	--	--	8	162.00	14.45	22	131.68	31.19
CUTE 4	29	149.66	29.58	28	155.64	30.67	28	156.07	38.42
COMPARISON	--	--	--	--	--	--	25	141.00	32.65
OKLA.CITY 1	30	159.07	25.36	30	161.50	22.26	30	157.23	27.10
COMPARISON	--	--	--	27	140.96	33.66	21	136.38	35.03
WICHITA 1	27	151.85	32.06	27	159.70	25.44	27	152.11	32.61
COMPARISON	--	--	--	26	133.35	30.04	23	128.91	35.01

TABLE 12

PENSACOLA Z-SCALE

Means, Standard-deviations, and Numbers of Student Teachers for each semester and each testing

	Time 1			Time 2			Time 3		
	N	$\bar{X}$	SD	N	$\bar{X}$	SD	N	$\bar{X}$	SD
CUTE 1	--	--	--	--	--	--	--	--	--
COMPARISON	--	--	--	--	--	--	--	--	--
CUTE 2	--	--	--	--	--	--	18	35.39	3.60
COMPARISON	--	--	--	--	--	--	34	33.91	3.63
CUTE 3	22	31.55	3.67	20	31.55	2.89	19	32.95	2.88
COMPARISON	--	--	--	8	34.00	2.14	22	33.14	2.96
CUTE 4	29	33.07	3.46	28	33.54	3.93	28	32.29	3.94
COMPARISON	--	--	--	--	--	--	25	33.92	3.34
OKLA.CITY 1	30	32.20	3.54	30	32.30	4.15	30	32.77	2.76
COMPARISON	--	--	--	27	32.89	3.57	21	32.48	3.96
WICHITA 1	27	31.63	4.56	27	33.00	4.98	27	33.07	4.60
COMPARISON	--	--	--	26	33.65	4.57	23	32.70	4.93

TABLE 13

CULTURAL ATTITUDE INVENTORY SCALE

Topic--K Score

Means, Standard-deviations, and Numbers of Student Teachers for each semester and each testing

	Time 1			Time 2			Time 3		
	N	$\bar{X}$	SD	N	$\bar{X}$	SD	N	$\bar{X}$	SD
CUTE 1	--	--	--	--	--	--	--	--	--
COMPARISON	--	--	--	--	--	--	--	--	--
CUTE 2	--	--	--	17	73.53	4.47	18	72.94	5.88
COMPARISON	17	72.06	5.08	--	--	--	36	72.00	5.38
CUTE 3	22	69.50	3.61	20	77.75	4.45	19	78.79	5.14
COMPARISON	--	--	--	8	74.50	5.15	22	74.05	5.35
CUTE 4	29	71.66	3.61	28	74.36	3.50	28	74.43	5.81
COMPARISON	--	--	--	--	--	--	25	71.48	6.40
OKLA.CITY 1	30	73.90	4.54	30	77.20	5.42	30	76.67	5.46
COMPARISON	--	--	--	26	74.30	5.42	21	75.76	5.73
WICHITA 1	27	72.26	5.27	27	74.59	5.87	27	75.33	5.57
COMPARISON	--	--	--	26	71.85	4.90	23	70.70	6.83

TABLE 14

CULTURAL ATTITUDE INVENTORY SCALE

Topic--A Score

Means, Standard-deviations, and Numbers of Student Teachers for each semester and each testing

	Time 1			Time 2			Time 3		
	N	$\bar{X}$	SD	N	$\bar{X}$	SD	N	$\bar{X}$	SD
CUTE 1	--	--	--	--	--	--	--	--	--
COMPARISON	--	--	--	--	--	--	--	--	--
CUTE 2	--	--	--	17	111.59	11.28	18	116.89	5.23
COMPARISON	17	109.47	7.00	--	--	--	36	109.42	6.68
CUTE 3	22	109.41	5.35	20	114.90	8.21	19	114.58	5.88
COMPARISON	--	--	--	8	111.38	5.15	22	105.50	7.41
CUTE 4	29	109.45	8.57	28	113.93	8.24	28	112.61	7.60
COMPARISON	--	--	--	--	--	--	25	108.00	8.61
OKLA.CITY 1	30	108.57	5.40	30	111.27	6.35	30	109.87	6.62
COMPARISON	--	--	--	27	107.15	7.03	21	107.48	6.46
WICHITA 1	27	108.74	7.17	27	112.78	6.95	27	112.37	7.59
COMPARISON	--	--	--	26	108.15	7.19	23	106.70	10.60

TABLE 15

CULTURAL ATTITUDE INVENTORY SCALE

Topic--Total Score

Means, Standard-deviations, and Numbers of Student Teachers for each semester and each testing

	Time 1			Time 2			Time 3		
	N	$\bar{X}$	SD	N	$\bar{X}$	SD	N	$\bar{X}$	SD
CUTE 1	--	--	--	--	--	--	--	--	--
COMPARISON	--	--	--	--	--	--	--	--	--
CUTE 2	--	--	--	17	197.71	10.94	18	203.28	10.17
COMPARISON	17	189.00	17.82	--	--	--	36	194.08	9.60
CUTE 3	22	191.36	8.02	20	205.00	10.08	19	206.16	9.73
COMPARISON	--	--	--	8	198.88	10.41	22	192.50	9.81
CUTE 4	29	193.24	11.22	28	201.21	11.39	28	199.75	11.73
COMPARISON	--	--	--	--	--	--	25	191.40	14.06
OKLA.CITY 1	30	195.17	9.38	20	201.57	10.58	30	199.23	10.59
COMPARISON	--	--	--	27	194.07	11.69	21	195.95	11.04
WICHITA 1	27	193.41	11.45	27	200.11	11.73	27	200.44	12.40
COMPARISON	--	--	--	26	192.46	10.79	23	188.87	16.63

TABLE 16

SEMANTIC DIFFERENTIAL

Topic 1--Evaluation

Means, Standard-deviations, and Numbers of Student Teachers for each semester and each testing

	Time 1			Time 2			Time 3		
	N	$\bar{X}$	SD	N	$\bar{X}$	SD	N	$\bar{X}$	SD
CUTE 1	22	25.32	2.25	22	23.59	3.74	22	24.91	2.83
COMPARISON	--	--	--	--	--	--	--	--	--
CUTE 2	18	24.89	2.89	18	22.61	4.13	18	23.11	5.32
COMPARISON	18	23.12	3.41	--	--	--	34	24.21	2.67
CUTE 3	22	23.95	3.54	20	21.80	3.93	19	23.74	4.12
COMPARISON	--	--	--	8	22.38	4.93	22	22.05	4.86
CUTE 4	29	21.48	4.05	28	18.89	4.88	28	18.89	6.94
COMPARISON	--	--	--	--	--	--	25	22.00	3.66
OKLA.CITY 1	30	23.70	4.13	30	22.90	3.49	30	23.07	4.85
COMPARISON	--	--	--	27	24.00	2.72	21	23.90	2.55
WICHITA 1	27	23.59	3.31	27	21.93	4.25	27	22.74	5.13
COMPARISON	--	--	--	26	24.73	2.76	23	23.91	3.36

TABLE 17

SEMANTIC DIFFERENTIAL

Topic II-Evaluation

Means, Standard-deviations, and Numbers of Student Teachers for each semester and each testing

	Time 1			Time 2			Time 3		
	N	$\bar{X}$	SD	N	$\bar{X}$	SD	N	$\bar{X}$	SD
CUTE 1	22	23.64	3.98	22	21.41	3.66	22	23.36	3.65
COMPARISON	--	--	--	--	--	--	--	--	--
CUTE 2	18	22.89	4.91	18	17.94	5.62	18	17.50	5.64
COMPARISON	17	21.41	4.42	--	--	--	34	22.18	3.56
CUTE 3	22	22.18	4.17	20	20.05	4.29	19	22.26	4.12
COMPARISON	--	--	--	8	21.25	5.01	22	21.14	3.54
CUTE 4	29	20.41	4.87	28	17.82	5.45	28	18.07	7.15
COMPARISON	--	--	--	--	--	--	25	19.24	4.83
OKLA.CITY 1	30	23.00	3.74	30	22.07	4.10	30	22.57	4.73
COMPARISON	--	--	--	27	22.89	3.86	21	22.10	3.35
WICHITA 1	27	21.04	4.14	27	20.19	4.48	27	21.44	4.40
COMPARISON	--	--	--	26	24.27	3.29	23	22.87	4.34

TABLE 18

SEMANTIC DIFFERENTIAL

Topic III--Evaluation

Means, Standard-deviations, and Numbers of Student Teachers for each semester and each testing

	Time 1			Time 2			Time 3		
	N	$\bar{X}$	SD	N	$\bar{X}$	SD	N	$\bar{X}$	SD
CUTE 1	22	23.77	3.02	22	23.36	3.51	22	23.91	3.80
COMPARISON	--	--	--	--	--	--	--	--	--
CUTE 2	18	22.39	3.48	18	24.89	2.97	18	24.44	3.07
COMPARISON	17	22.71	2.97	--	--	--	34	23.21	3.16
CUTE 3	22	22.68	2.28	20	22.30	3.37	19	23.79	3.43
COMPARISON	--	--	--	8	23.63	2.00	22	22.23	3.10
CUTE 4	29	22.59	2.28	28	23.11	2.47	28	24.54	2.32
COMPARISON	--	--	--	--	--	--	25	22.48	3.22
OKLA.CITY 1	30	24.63	2.50	30	24.20	2.77	30	25.23	2.14
COMPARISON	--	--	--	27	23.37	3.07	21	23.33	2.52
WICHITA 1	27	23,63	2.60	27	23.41	2.50	27	24.70	2.45
COMPARISON	--	--	--	26	23.96	2.95	23	22.48	5.16

TABLE 19

SEMANTIC DIFFERENTIAL

Topic IV--Evaluation

Means, Standard-deviations, and Numbers of Student Teachers for each semester and each testing

	Time 1			Time 2			Time 3		
	N	$\bar{X}$	SD	N	$\bar{X}$	SD	N	$\bar{X}$	SD
CUTE 1	22	13.68	5.23	22	13.64	4.77	22	15.00	4.33
COMPARISON	--	--	--	--	--	--	--	--	--
CUTE 2	18	13.67	5.94	18	10.00	5.93	18	10.28	5.69
COMPARISON	17	14.29	4.24	--	--	--	34	14.29	4.87
CUTE 3	22	14.23	4.22	20	12.45	3.94	19	12.79	6.21
COMPARISON	--	--	--	8	10.75	5.42	22	14.55	5.64
CUTE 4	29	10.38	4.78	28	10.82	6.05	28	11.54	6.71
COMPARISON	--	--	--	--	--	--	25	10.92	4.86
OKLA.CITY 1	30	13.27	5.07	30	11.37	5.19	30	13.37	5.37
COMPARISON	--	--	--	27	12.41	4.62	21	12.86	5.69
WICHITA 1	27	11.44	4.93	27	11.37	3.64	27	10.85	4.73
COMPARISON	--	--	--	26	13.15	5.23	23	15.17	5.72

TABLE 20

SEMANTIC DIFFERENTIAL

Topic V--Evaluation

Means, Standard-deviations, and Number of Student Teachers for each semester and each testing

	Time 1			Time 2			Time 3		
	N	$\bar{X}$	SD	N	$\bar{X}$	SD	N	$\bar{X}$	SD
CUTE 1	22	18.00	5.30	22	15.80	5.65	22	16.45	4.90
COMPARISON	--	--	--	--	--	--	--	--	--
CUTE 2	18	18.72	5.19	18	15.56	4.16	18	15.11	4.98
COMPARISON	17	15.88	5.75	--	--	--	34	15.53	6.10
CUTE 3	22	16.05	4.04	20	16.05	5.12	19	16.79	5.92
COMPARISON	--	--	--	8	11.75	4.74	22	15.86	5.32
CUTE 4	29	16.76	5.58	28	14.21	6.01	28	16.00	5.94
COMPARISON	--	--	--	--	--	--	25	14.04	4.99
OKLA.CITY 1	30	16.17	5.15	30	12.93	4.61	30	13.47	4.97
COMPARISON	--	--	--	27	14.89	5.81	21	15.52	4.41
WICHITA 1	27	15.78	5.77	27	12.59	3.61	27	12.30	5.50
COMPARISON	--	--	--	26	15.96	5.68	23	14.74	5.41

TABLE 21

SEMANTIC DIFFERENTIAL

Topic VI--Evaluation

Means, Standard-deviations, and Numbers of Student Teachers for each semester and each testing

	Time 1			Time 2			Time 3		
	N	$\bar{X}$	SD	N	$\bar{X}$	SD	N	$\bar{X}$	SD
CUTE 1	22	25.82	1.94	22	25.45	2.60	22	25.32	1.76
COMPARISON	--	--	--	--	--	--	--	--	--
CUTE 2	18	25.39	2.79	18	24.50	2.50	18	24.22	3.26
COMPARISON	17	25.06	2.36	--	--	--	34	24.38	3.98
CUTE 3	22	24.86	2.55	20	25.30	2.70	19	25.16	2.83
COMPARISON	--	--	--	8	26.38	1.60	22	24.36	3.42
CUTE 4	29	25.62	2.06	28	25.07	3.14	28	25.89	2.08
COMPARISON	--	--	--	--	--	--	25	25.08	2.63
OKLA.CITY 1	30	25.53	2.60	30	25.37	1.73	30	26.40	1.71
COMPARISON	--	--	--	27	25.41	2.31	21	24.67	2.58
WICHITA 1	27	25.67	2.39	27	24.93	2.15	27	25.19	2.37
COMPARISON	--	--	--	26	26.23	2.03	23	24.91	3.75

TABLE 22

SEMANTIC DIFFERENTIAL

Topic VII--Evaluation

Means, Standard-deviations, and Number of Student Teachers for each semester and each testing

	Time 1			Time 2			Time 3		
	N	$\bar{X}$	SD	N	$\bar{X}$	SD	N	$\bar{X}$	SD
CUTE 1	22	22.32	3.48	22	20.77	4.15	22	22.05	3.67
COMPARISON	--	--	--	--	--	--	--	--	--
CUTE 2	18	21.11	5.70	18	17.89	5.73	18	18.33	6.50
COMPARISON	17	23.12	3.82	--	--	--	34	22.41	4.24
CUTE 3	22	22.45	3.62	20	18.10	6.02	19	21.53	4.22
COMPARISON	--	--	--	8	19.25	6.88	22	19.73	5.17
CUTE 4	29	19.17	6.01	28	15.25	7.18	28	14.82	7.32
COMPARISON	--	--	--	--	--	--	25	20.48	4.84
OKLA.CITY 1	30	22.87	3.80	30	20.77	4.96	30	21.87	5.92
COMPARISON	--	--	--	27	22.04	4.96	21	21.95	4.71
WICHITA 1	27	21.85	3.69	27	21.67	3.14	27	21.67	4.42
COMPARISON	--	--	--	26	22.96	3.80	23	22.17	4.97

TABLE 23

SEMANTIC DIFFERENTIAL

Topic VIII--Evaluation

Means, Standard-deviations, and Number of Student Teachers for each semester and each testing

	Time 1			Time 2			Time 3		
	N	$\bar{X}$	SD	N	$\bar{X}$	SD	N	$\bar{X}$	SD
CUTE 1	22	24.18	3.16	22	23.91	2.64	22	24.09	3.46
COMPARISON	--	--	--	--	--	--	--	--	--
CUTE 2	18	23.56	3.60	18	22.89	3.50	18	24.22	3.42
COMPARISON	17	22.41	3.18	--	--	--	34	22.12	3.62
CUTE 3	22	23.55	3.29	20	22.30	3.56	19	24.11	3.38
COMPARISON	--	--	--	8	22.13	4.58	22	22.55	2.69
CUTE 4	29	22.72	3.25	28	20.89	4.37	28	21.82	4.75
COMPARISON	--	--	--	--	--	--	25	22.68	2.64
OKLA.CITY 1	30	24.20	3.08	30	23.67	2.80	30	25.20	2.33
COMPARISON	--	--	--	27	23.26	3.08	21	23.19	2.48
WICHITA 1	27	22.67	3.40	27	21.74	4.13	27	23.81	3.31
COMPARISON	--	--	--	26	23.38	2.82	23	22.39	3.88

TABLE 24

SEMANTIC DIFFERENTIAL

Topic IX--Evaluation

Means, Standard-deviations, and Numbers of Student Teachers for each semester and each testing

	Time 1			Time 2			Time 3		
	N	$\bar{X}$	SD	N	$\bar{X}$	SD	N	$\bar{X}$	SD
CUTE 1	22	0.0	0.0	22	0.0	0.0	22	0.0	0.0
COMPARISON	--	--	--	--	--	--	--	--	--
CUTE 2	18	0.0	0.0	18	23.89	3.64	18	23.00	4.41
COMPARISON	17	23.29	3.57	--	--	--	34	21.79	5.05
CUTE 3	22	23.82	3.43	20	22.45	4.41	19	24.32	3.61
COMPARISON	--	--	--	8	22.63	4.27	22	21.95	4.50
CUTE 4	29	23.45	3.26	28	22.18	3.90	28	23.54	3.51
COMPARISON	--	--	--	--	--	--	25	22.92	3.55
OKLA.CITY 1	30	24.17	3.76	30	23.87	3.16	30	25.10	2.93
COMPARISON	--	--	--	27	23.00	3.55	21	23.62	2.62
WICHITA 1	27	23.63	3.61	27	23.11	3.45	27	24.48	2.46
COMPARISON	--	--	--	26	23.38	4.81	23	21.43	4.86

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